

# A lack of energy

The government says it takes energy security seriously so it encourages more wind and solar. Opposition parties want a faster run down of the gas and coal power stations that have been keeping the lights on, and query biomass at Drax. This would destabilise us more.

On Sunday demand was about one third below peak but we were dependent for than a quarter of our electricity on imports. This is alarming and shows the dangers to security and self sufficiency from premature fossil fuel plant closures and undue reliance on intermittent renewables.

If government insists on more renewables it first needs to get someone to put in massive investment in some combination of

More grid capacity

Large battery stores

Conversion of power to hydrogen and its derivatives

More pump storage

Government claims renewables are cheaper than gas generation. They do not usually allow for the extra grid and storage costs, or for back up power. If this were true then some of the cost gain has to be spent on storage and transmission.

If it is as some expect that fully costed renewables are dearer government needs to tell us the extra costs and explain who pays.

Given the delays in rolling out hydrogen and large battery with extra grid it is probably necessary to add more combined cycle gas capacity for the transition. This is what Germany is now thinking of doing.

It is quite wrong to be so dependent in imports. It loses us jobs, costs us tax revenues, puts big strains on our balance of payments. The EU is energy short, so it is very dangerous to rely on imports from them.

The ideas that we can muddle through with insufficient power on low wind days rests on two dangerous assumptions. It assumes everyone will accept a smart meter and accept the use of differential pricing to shift power demand away from peaks when renewables are low. It assumes many more people will own an electric vehicle and will be prepared to plug it into their home and run down the battery to heat and fuel the home when renewable power is scarce. Many people are resisting having a smart meter as they do not like this idea. Most people are not ready to buy an electric car or cannot afford one, and few are volunteers to have one to act as an adjunct of the national power supply.